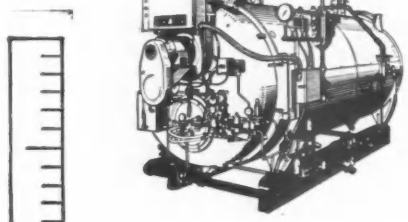
# ARIZONA ARCHITECT

OFFICIAL PUBLICATION OF THE ARIZONA SOCIETY OF ARCHITECTS, THE CENTRAL ARIZONA CHAPTER AND SOUTHERN ARIZONA CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS

MARCH 1958 Vol. 1, No. 7

In this Issue: Arizona's Public Schools

# An Accurate Yardstick of Boiler Value:



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**March, 1958**
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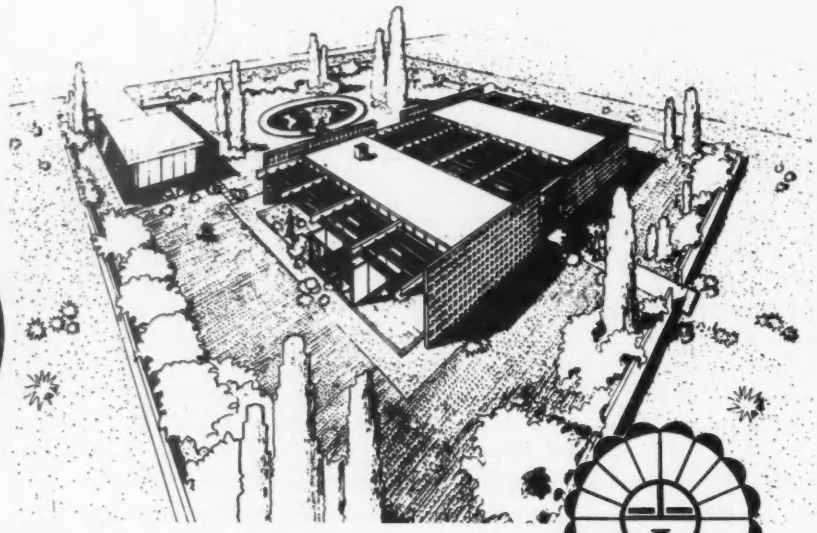

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# THE PRESIDENTS' PAGE

**SOUTHERN ARIZONA CHAPTER**

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**CENTRAL ARIZONA CHAPTER**

**David Sholder**

(GUEST COLUMN BY EDWARD H. NELSON, AIA.)

OVER THE NEXT two decades, this country will be confronted with an enormous increase in population. We will experience tremendous expansion of cities, one growing into another as Washington, Baltimore, Philadelphia and New York are now doing. With the pushing out into the farmland, the endless multiplication of highways and suburbs, and the rise of city apartment developments, will come deterioration and decay of the older residential and business neighborhoods. Most of us who now live in a rural or semi-rural environment will be living in a vast urban one. The result of this great man-made landscape could be depressing, chaotic and a constant source of irritation, or it could be full of order and beauty.

We architects have a grave responsibility not only for the creation of the skyline, but also for the creation of new patterns and the control and renewal of old patterns within these great urban agglomerations of the future.

The form of leadership we provide depends on the individual architect. Every city or county planning commission, citizens committee dealing with problems of growth of the city, neighborhood council, and state or federal planning agency should have an architect represented. Architects individually and in groups should be participating in planning activities, either as a public service or as professionals providing planning services. The public relations efforts of architectural groups should be helping to promote good planning of suburban areas, of subdivisions, of street patterns, of major routes, of parks and recreation areas, and of industrial and business neighborhoods. The architects should also be concerning themselves with the prevention of decay and the rehabilitation and replacement of decaying city neighborhoods through citizen and professional participation in urban renewal programs.

We are at the threshold of the age of planning. Let us seize the opportunities to be of service as we enter this age.

NO LARGE BUILDINGS are erected without the guiding hand of an architect. As the size and importance of buildings decrease, however, the percentage designed by architects gradually decreases. On the surface it would appear that architectural service falls into what is termed the "luxury class"—a service to be bought by the few who can afford it or who, through some circumstances, must have it. Laymen are too prone to accept this point of view. On the other hand, those who have learned the value of architectural services, consider them a *necessity*.

Architectural service can hardly be placed in the luxury class with jewelry and expensive automobiles. Neither can it be put in the necessity class with clothing, food and shelter. Yet it is a service essential to the sound development of building projects, large and small. It is a service that particularly demonstrates the architect's skill; it is a service that can usually be had for little or no additional cost. Too many people think that its small cost is something to be saved or applied to secure some gadget that could not otherwise be afforded.

Permitting the public to look upon the architect's services as a luxury is a fault of the profession itself. While the profession as a whole has concentrated on the big jobs it has let the small jobs get done as best they could. In so doing it has overlooked a large, fertile field.

Today we are passing through a transitional period, an era that will doubtless have a marked effect on architecture and architectural practice. The old expression, "keep your ear to the ground," is replaced by, "keep your eyes on the sky." The satellites and guided missiles are with us.

The profession must establish itself in every community as a powerful factor in the building industry. This means closer contact with the public than in the past, and leadership in moulding public opinion in all matters associated with building. When the profession gets "close" to the public, its services will be viewed as a necessity and not a luxury.

# CENTRAL CHAPTER NEWS

The Chapter's March meeting featured officers and members of the board of directors of the Arizona Building Contractors' Association. "Jobs in Remote Areas" and "Jurisdictional Disputes in the Building Trades" were subjects that provoked keen discussion among the members. So much interest was developed that the session had to be summarily adjourned at 10:30.

The April 3 meeting (6:30 p.m. at the ABC Club) will feature a talk on the subject: "CSI as Part of Your Team," by Norman E. Blair, president of the Central Arizona Chapter, Construction Specifications Institute.

Robert Sexton has been approved for corporate membership; and Ramon Martinez and Thomas Blackwood for associate membership.

**May Meeting and Honor Awards**

Cornelius M. Deasy, AIA, past president of Southern California Chapter, will address the joint meeting and honor awards dinner of the Central Arizona Chapter and architectural students at Arizona State on Thursday, May 8 at 7:30 p.m. in the Memorial Union Building on the campus at Tempe. Deasy's penetrating observations are well remembered by those who have heard him speak at the last Mountain States Regional Conference, or elsewhere.

At this May meeting (which is being held at a different date, hour and location than normal for chapter meetings), awards and scholarships will be presented to architectural students at Arizona State. The meeting will also feature announcement of winning entries in the new Chapter Honor Awards Program, patterned after those carried on annually at regional and national levels.

The Awards program, which is open to all architects registered and residing in Arizona, will culminate with a judgment on May 1st. Work will be entered in the separate categories of Completed Work and Proposed Work. Deadline for entries is May 1st. Jury is to be announced at an early date. Winning entries will be exhibited at various places in the Valley.

Because the time for preparation of entries is relatively short, the program is being based on minimum requirements for entries in order to permit maximum use of photos and other material ordinarily available. The program is under the direction of the Awards and Scholarship Committee consisting of Henry Arnold, AIA, Blaine Drake, AIA, and Murry Harris. A written program setting forth all requirements is being mailed to all corporate and associate members.

---

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Winner will also receive an individual award of $50. Competition will be based on the most ingenious usage of a folding door in a type of construction to be designated by James W. Elmore, AIA, head of the division of Architecture, Arizona State College at Tempe.

Closing dates for entries will be April 24, 1958. Awards will be announced and presented at the May 8 Awards Dinner of the Central Arizona Chapter, American Institute of Architects.

Further details of the competition, including design problem, are being mailed to architects.

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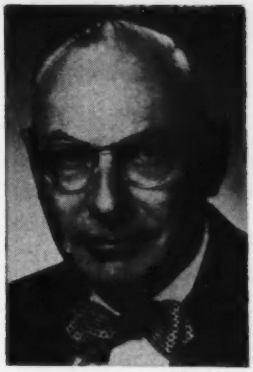


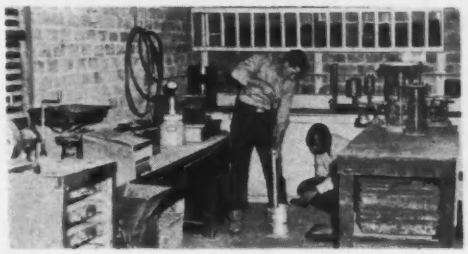
## LEWIS NEEB IS CALLED

Lewis S. Neeb, member of the Board of Technical Registration and long-time teacher in the Valley, died in Phoenix February 15. He was 68.

The lives of thousands of students and professional men have been helpfully influenced since Mr. Neeb came to Arizona in 1919 as an industrial arts teacher and athletic coach. He was with Phoenix College from 1926 to 1930, at which time he joined the Industrial Arts Department at Arizona State College at Tempe. He headed the department for many years until 1957.

A Mechanical Engineer with License No. 652, Mr. Neeb served many terms on the Board of Technical Registration since 1934. During World War II he was chief engineer at Mare Island Navy Yard.

Active in civic and professional organizations, he is survived by his wife, Rayma Neeb, who is executive secretary of the Board of Technical Registration; by a son, Lewis Jr., of Tempe; a daughter, Mrs. J. W. Craver, Honolulu; a brother and one grandchild.

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Next month: More about residential soils testing.

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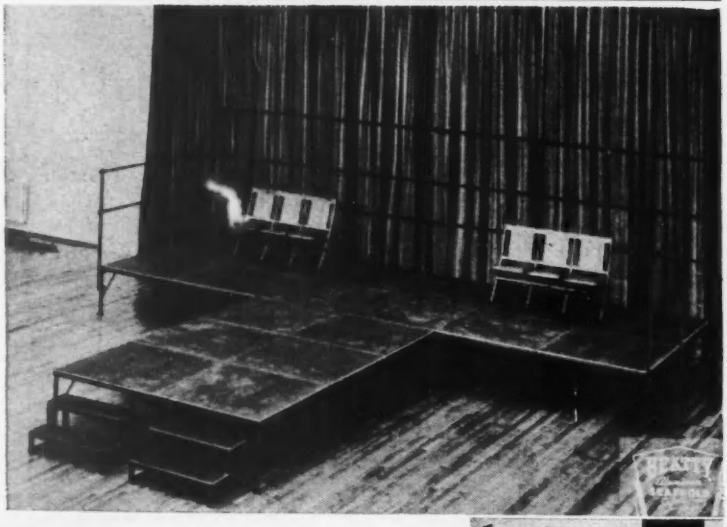

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# The Editor's PERSPECTIVE

REG MANNING, Arizona's Pulitzer Prize cartoonist, first called my attention to the "other arts" of architects. That was about three years ago, when he said he would like to see an exhibit of their water-colors.

Earlier this year I learned that even the "doodling" of architects can be interesting. Following a Southern Arizona Chapter meeting the "art" reproduced here was found on a paper napkin. While it is thought to be the work of William Wilde, AIA, our art experts

have not yet positively identified it as genuinely Wilde. Anyway, it is enough to suggest that it would be fun to see the "doodling pads" in AIA offices. If alert secretaries and draftsmen will collect them for us we might have an interesting feature in a future issue.

Meanwhile, the squib carried in last month's *Arizona Architect* asking for the "other art" of architects has brought gratifying response. It now appears inevitable that we will be able to arrange a public exhibit of the art work of AIA members, showing it both in Phoenix and Tucson later in the year. To whet your appetite for the good things in store, we will begin featuring some of these works on our pages. Already we have the names of architects who have worked in oils, water-color, etching, dry-point, tempera, pen-and-ink, sculpture, and other media.

One fact emerges from our initial inquiry. Much talent in the "other arts" is not getting exercised because the architects just haven't time. More's the pity, and we hope our series may inspire them to get back to their easels again.

For a 7-months-old baby, *Arizona Architect* has stirred up a lot of interest. We've had requests from many places throughout the country for permission to reprint articles published here. Always gladly granted. Our recent, somewhat veiled comments on mortar and the need for closer inspections by architects have brought prompt and desirable action in the local construction industry. Next we may take a look at plumbing and other elements of construction and see what truth there may be to some of the other rumors we've heard.

Our decision to use varying "AIA" designs on the cover has resulted in many of them being submitted. More are wanted. The "Arizona Architect", too, will soon be changed from the rather ordinary printer's type used to date.

This month brought a complete new cover suggestion from Southern Arizona Chapter's Gudmund Martinson. It was so attractive and so thoughtfully designed that we print it here for your reaction. But first, read Martinson's philosophy of architecture in the letter which accompanied the drawing:

"Today, as in the past, one can truthfully say that architecture is a product of history through the ages originating across the sea but imbued with creative thoughts of the modern architect.

"It, therefore, is but proper that the cover of our magazine reflects, not the ever-changing present but the factor of the classics which is constant and from which it is derived. That is why I give this design a classical touch for permanence and dignity, which also radiates confidence as well as the solid principles on which the American Institute of Architects is founded.

"The Latin phrase is symbolic and means: 'They who cross the sea change the sky but not their feelings,' which further illustrates the basic birthrights of architectural principles."

## RECIPROCITY?

By Fred H. Jobusch, AIA

"Is registration in Arizona reciprocal with that of other states?" That question frequently is asked of members of the Board of Technical Registration. The answer is "NO!" There is no agreement between any of the states providing reciprocal registration. Each individual is considered on his own merits with a completely objective analysis made of credentials presented.

However, all but a very few of the states and territories take full cognizance with theirs. This is made more practical through the National Council of Architectural Registration Boards. The NCARB's purpose is to coordinate the procedure of architectural registration boards throughout the nation; to establish minimum standards of competence which are acceptable in all states; to simplify interstate registration of individual practitioners by providing a procedure for the exchange of credentials through a national file.

The NCARB is a confederation of autonomous boards, a "Council", and has no licensing or registration authority. Once each year, for four days prior to the annual AIA convention, the Council meets. This Council is composed of representatives of all the registration boards in the states and territories, and the annual meeting provides for exchange of views and the conduct of business within its jurisdiction.

Not all state boards accept NCARB's standards. For example, California requires an additional study and presentation of an essay on seismic analysis. Illinois requires an additional four hours of examination in structures. Practically all states require the candidate to appear for a personal audience. This enables the Board to more fully judge a candidate's professional attitude and gives the candidate the opportunity to fully understand his rights and obligations under the law.

*AIA Takes a Look at*

# TUCSON'S SCHOOLS

Tucson schools have had a thorough going-over by a special AIA committee appointed at the request of the Board of Trustees, School District No. 1.

Headed by Emerson C. Scholer, the Southern Arizona Chapter committee requested every member of the chapter to comment on existing school building policies and provide ideas to improve school buildings. Several meetings were held at which all architects who had experience in designing schools were invited to participate.

The report, which is a sincere attempt to reflect the opinions of all of the practicing architects, was recently given to the school trustees. It listed all the school projects since 1949—19 new elementary schools and 8 additions; 2 junior high schools and 3 high schools. Listed were the year of construction, square foot cost, total cost, square foot area and student capacity.

Following are major elements of the report:

Of the elementary schools, only two employ wood roof framing which also serves as the ceiling. All of the rest are steel framing with brick masonry walls, masonry partitions—some plastered, some unplastered. The majority of the buildings are arranged with interior corridors with tile facing in the corridors. Approximately the same area of classroom space is used in every elementary school. A great uniformity in arrangement and millwork in elementary classrooms exists, and in virtually every building the millwork is of birch. Toilet rooms are finished with tile wainscoting and tile floors. Asphalt tile finished floor in other areas is the predominant material. Acoustic tile ceilings are in almost all areas. Electrical fixtures are about the same throughout the system. All of the elementary schools include a community room. In each school, approximately the same area is devoted to administrative uses. All of the elementary schools are provided with central heating and provide evaporative cooling. The total construction cost of all of the schools built in this period is $15,561,774.15. This represents a total area of 1,347,758 sq. ft. This construction has provided for 15,100 children.

In general, there is little spread in unit costs in the schools built since 1949. They seem to reflect the general economic trend from year to year, the individual ability of the architect, and the competitive spirit of the bidders. The unit costs compare favorably with other schools built in Arizona at the same time, and are considerably below the national average. We apparently get more for our money here in Tucson than in other places in the country.

**Some Basic Facts About Construction.**

The amount of space enclosed is always a direct ingredient of the cost. The distribution of costs in most building types is as follows: Approximately 1/3 represents the structural shell and basic enclosure. This includes the roof, outside walls, windows and structural system. The mechanical features, including heating and ventilating, plumbing and electrical work, represent approximately 1/3; and the interior partitions, finish, millwork, chalkboards, tackboards, acoustical treatment, painting, hardware and resilient floor covering represent approximately 1/3 of the cost. Some variation can, of course, take place in these larger divisions with regard to the selection of materials and their arrangement.

The true way to effect economics in building, irrespective of type and use, is to apply the principle of selecting a material which combines structure, closure and finish all in one operation. This is the basis on which all manufacturers are redesigning their products. The amount of raw materials to produce a product is more or less fixed and inescapable. The labor involved in manufacture and assembly is the main ingredient which can be varied and which the designer has the power to vary.

It is a simple enough matter for someone to walk into an existing building, regardless of its cost, and say the building could have been built more cheaply. To illustrate this point, take a building which has plastered walls over brick masonry. It could be made cheaper by simply eliminating the plaster and the paint, or by using concrete block instead of brick masonry, or even by going to studs and stucco, or simply by box construction with tar paper covering on the outside. So, then we may draw the conclusion that any building can be built for less money providing we are willing to give up something.

An example of this premise or principle in schoolhouse construction in the Tucson area is the comparison of 21 rooms in the Peter Howell school built at a cost of $318,000, and 20 rooms built at approximately the same time in the Amphitheater District for a cost of $206,000. The difference in the number of rooms is not too significant although in the Amphitheater building, there is one less classroom and no community room. The corridors are enclosed in Peter Howell school and finished with tile wainscot, wherein the corridors in the Amphitheater school are simply covered porches. There is no plaster used in the Amphitheater building, and 14 classroms are not treated

(*Continued next page*)

# AFTER YEARS OF RESEARCH...

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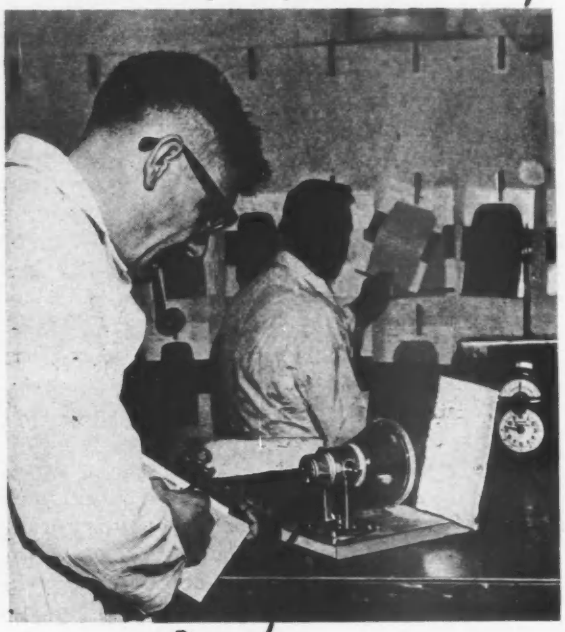

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acoustically. Peter Howell school is equipped with a central hot water radiant heating system, wherein the Amphitheater school is heated by individual unit heaters in each classroom. The Howell school has a central evaporative cooling system, and there is no cooling in the Amphitheater school. The millwork in Peter Howell school is of hard wood construction, wherein the millwork in the Amphitheater school is of soft wood construction. The Howell school is built of materials with an eye towards minimum maintenance over the years, whereas the Amphitheater building is obviously a minimum construction attempt and is quite costly in year-to-year maintenance. The noise factor of the individual unit heaters is apparent.

The important thing, aside from what has been given up in the Amphitheater school, is that the difference in unit cost between the two schools compared is 75 cents a square foot. In subsequent years, it is interesting to note that as financial ability improved in the Amphitheater schools, many of the features omitted in the example school above were incorporated in more recent construction, and the unit costs equal and sometimes exceed those of the Tucson Public Schools.

Obviously unless statutory limitations prevent otherwise, it is a more sound and economical investment to build schools in the spirit and of materials as has been the practice in the Tucson district than to attempt what might be called "minimum construction."

**The Re-Use of Plans.**

There is no objection to the idea of building more than one school from a single set of plans providing the schools be built at approximately the same time or within the same year of the development of the plans. Naturally, site restrictions would have to be adjusted, and there should be a definite similarity in traffic flow around the site to properly fit the same plan from one site to another. These things being met, a good solution on one site would certainly fill the bill on another. However, to re-use plans for schools in later years is as to say, "We liked our 1946 Chevrolet so well, let us just keep buying that model whenever we need another car." This obviously is not practical if we want to take advantage of improvements and developments as they take place in either materials or educational processes. Manufacturers are constantly revising products for economic and functional consideration, and the consumer is entitled to these improvements. This is the spirit of progress. Progress is the spirit of education.

**Conclusions and Recommendations.**

From the investigation carried on to assemble this report, we can freely conclude that Tucson is getting

(*Continued next page*)

# PHOENIX AREA HIGH SCHOOLS INSPECTED

In response to a written invitation to Valley architects, engineers, legislators, newspaper editors, taxpayer associations, school administrators and trustees, about 30 people met at Phoenix's Central High School Saturday morning, March 8, for an on-the-ground, face-to-face study of recent high school construction. Other schools visited were Washington High, recent unit in the Glendale Union High system, and the new Carl Hayden High in the Phoenix Union H. S. District.

Ralph Haver, chairman of the special arrangements committee had announced that "the purpose of the first-hand study will be to help architects get a better understanding of the public temper and ideas on school construction — and costs — and at the same time to help representatives of the public better understand certain factors of economy and good design that may not be readily apparent to non-professional observers."

At Central High, architects and school officials showed a new plant in which part of the buildings were designed for a student population of 1500, with other facilities ready for an expected 2500. The latter include library and administration buildings, kitchen, boiler plant, air conditioning tunnels, etc. Architect was John Sing Tang.

At Washington High, in a rapidly growing district with limited tax assessment sources, the group saw a school constructed three years ago and additions built last year. Designed for a student population of 800, Washington High is having to care for 1250 this year. The plant, including construction, buildings, site, grading, irrigation, paving, and most built-ins except kitchen, science equipment, lockers and gymnasium bleachers, cost $9.38 per square foot. Architects were Edward L. Varney Associates.

Carl Hayden High, designed for 1500 and now serving over 1700 students, is a "Class A" fully heated and refrigerated plant built at a cost of $10.70 per square foot. Architects were Lescher and Mahoney.

The tour was under the general guidance of Fred Weaver, assisted by representatives of the architectural firms designing the plants. Officials of several school districts, both elementary and high school, were among those on the tour.

— AIA —

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TUCSON'S SCHOOLS (*continued*)

its money's worth in its schools. From the unit costs, which are a matter of record, we are getting more for our dollars than most places in the country. Our schools are not built extravagantly but are built in a way to stand the use and abuse of the juvenile traffic with a minimum of upkeep and maintenance. That schools can be built for less money is quite apparent. To build schools for less money, we must either make the building smaller, leave out something in the way of equipment or select lesser materials.

We would recommend that the planning philosophy be carried on in the future much the same as it has been in the past; that each architect constantly be urged to exercise his inventive genius to produce a more and more economical arrangement of both plan and structure, and that he adhere to the rules of selecting structure, enclosure and finish in as few materials as possible; that materials which come in contact with student traffic be as durable, maintenance-free, and ever-lasting as practicable, and that materials which are not in contact with student traffic be as economical as is possible and consistent with sound and safe engineering practices.

Below. Part of the group of school officials, newspaper representatives, architects and engineers on Phoenix Area school inspection.

# Notable Quotes . . .

## *About Schools*

*Leon Chatelain, Jr., President of the American Institute of Architects, before the 39th annual convention of the Associated General Contractors of America. February 11, in Dallas, Texas:*

The substantial expense of school buildings is the interest paid on financing and the annual cost of maintenance and repair. For this reason, we have this seeming paradox – only the *wealthy* community can afford a cheap school.

Besides long-range planning and design tailored to specific community needs, permanence of building is essential to economy. Consider the cost of replacing temporary buildings; not just the construction, but the financing. The difference between a 2% and 3% interest rate can be 20% of the cost of the entire building. Today's school should be built of first-class materials and it should be built to last for 40 years.

Mr. Smith's share of his community's school-building costs will cost about the same amount that he would spend in one evening by hiring a baby-sitter and taking his wife to dinner and a movie.

As architects and contractors, it is our joint responsibility to build schools which, unlike the prison-like, pompous buildings of yesterday, serve to *encourage* learning. If such buildings can be combined with imaginative teaching that stimulates student curiosity in the physical sciences – *and* the arts – it is entirely possible that our young people may come to consider the acquisition of knowledge as something which is not only socially desirable, but pleasurable. If this is done, we as a nation will have nothing to fear from anybody – not even ourselves.

*Dr. John R. Miles, Committee on Education of the U. S. Chamber of Commerce, before a gathering of businessmen and educators in Phoenix, March 3rd.*

Where the educational level is high, incomes are higher, productivity is higher, retail sales are higher, and political activity in terms of making representative government work is much higher.

Debts for school construction in Arizona don't begin to compare with debts in other parts of the country. You are not paying excessive prices for school rooms.

If a community *wants* better standards it will *get* better standards. We had better start wanting them. . . . If local action doesn't find taxes for schools, Uncle Sam isn't going to let education go down the drain. We're going to have good schools in this country even if we have to force them on people. It isn't necessary, but we have to find a way to hold the ideological line in the conflict we're in.


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# TECHNOLOGY and SCHOOL DESIGN

*By John W. McLeod, AIA*
Vice-chairman AIA Committee on School Buildings

(Part of a talk before New Jersey School Board Association issued in reprint form by the Architectural Foundation, American Institute of Architects).

A second factor which may influence school planning is technological advance in design and materials. The building industry is now ready to supply us with an array of new materials—materials which need not require us to discard completely the tried and true products but should permit us new flexibility to adjust our buildings to changing demands.

Specifics include:

- New daylighting control methods
- New electrical lighting methods
- Packaged heating and air conditioning
- Precast structural systems and roofing panels

Great interest has developed in the past few years in many new metal curtain-wall treatments. Large units of window and wall panel are available in steel and aluminum, so insulated that a 2" thickness of panel wall can do the work of a 12" masonry wall. This is just one example of a type of component prefabrication.

A great many laymen have supposed that the architectural profession is opposed to prefabrication. I can assure you that this is not so—the AIA for years has been chief proponent of modular coordination, which is, of course, forerunner of all forms of prefabrication. What the architectural profession is opposed to, however, is over-the-counter sale of packaged prefabricated classroom space. I have worked with school boards, faculty committees and citizens' advisory groups, discussing, analyzing and evaluating needs and wishes of a great many communities in relation to their school building programs. With this as a background, I cannot convince myself that we are ready to set these things aside and accept one or another manufacturer's idea of what a school room should be. I realize that a great many school board members, superintendents, and yes, even architects, become "battle-weary" from constantly fighting rising costs, rising enrollments, etc., but surely, achievements we have made in this country, through education at local level, are not to be exchanged lightly for some mail-order panacea for all of our school-building ills.

(*Continued next page*)


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TECHNOLOGY and SCHOOLS (*continued*)

What I would propose to industry is this—concentrate on producing more and more complete assemblies of component parts of structures and accessories, so that advantages of mass-production, in terms of reduced costs and accelerated delivery schedules, would be of material benefit to all, and not alone to some particular manufacturer. Advantages are obvious —wide range of selection among products, retention of traditional practices of competitive pricing and public bidding, and most important of all, freedom to plan a school building, using these standard components, but in such a way that it will function for betterment of educational processes, rather than to strangle them.

Finally I would say—encourage your superintendent and his staff to explore new and better ways of teaching and then further, encourage your architect to use some of the new and exciting materials which are becoming available, so that benefits of our American productive know-how will be returned to us in reduced costs and better school buildings. Mistakes may be made but these mistakes should not be used as excuses to divest ourselves of our responsibility to provide our children with the best possible education and in best possible buildings we are able to provide.


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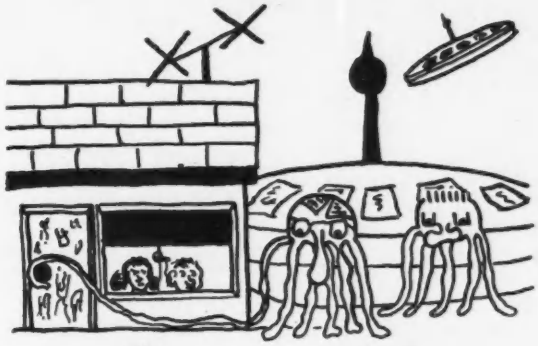

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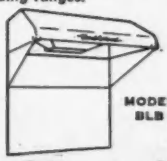

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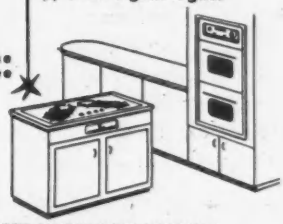

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# IN THE BOOK WORLD

**"Good Housekeeping Book of Home Decoration" by Mary L. Brandt.** McGraw-Hill, $7.95. Reviewed by Arden Taylor.

For anyone redecorating his home, or starting "from scratch" with a new home this book offers a wealth of ideas. Room by room the author progresses throughout the house from the kitchen and family rooms to powder rooms and patios, discussing each individually. Depending upon the use of the room and the atmosphere you want to create, there are hundreds of practical suggestions on furniture and furniture arrangements, accessories, walls, floors, lighting, window treatments, and color schemes.

Completely geared to today's living, this handbook shows simple methods for making home a place in which to enjoy living and entertaining.

There is also a section on "How To Buy." This includes furniture, drapery fabrics and curtains, floor coverings and wallpaper.

The book is well illustrated and the text kept at a minimum for interesting and easy reading.

**"Architectural Photography of Houses" by Robert Cleveland.** F. W. Dodge. $7.50. Reviewed by Murry Harris.

As though it has not been previously and fully proven before, "Architectural Photography of Houses", again confirms the fact that the human eye is an astounding instrument that perceives instantly what the camera laboriously achieves through considerable contriving. The photographic achievement, at that, is tinged with what is invariably an artificial deception masquerading under the excuse of "composition".

Such contriving may be understandable for the purpose of art gallery photography, but it is questionable when illustrating the realities of architecture. This becomes immediately apparent in the clear, concise directions Mr. Cleveland gives for moving furniture from its normal position, placing lights where none exist, and other similar tricks keyed to produce a photograph that idealizes the room being photographed. Exteriors cannot be so mistreated because they cannot be easily rearranged and are more technically demanding. Perhaps that is why there are only 33 exterior photographs in contrast to 297 interiors that are illustrated. Incidentally, all the photographs are in black and white, and are accompanied by a technical analysis and description of the colors and finishes of the subject matter. This technique results in a discussion and illustration of a 'kind' of architectural photography—and reveals it to be a surprising art. From the architect's point of view, it is disappointing that the angle of vision and depth of focus of the contents are limited to houses and primarily to their interior decoration.

This book could well be a "must" in a good library, for if no other lesson is learned, and there are many clearly stated and diagrammed, you will be impressed by the explanations and the fact that good architectural photography is not necessarily the result of elaborate and expensive equipment or psychic insight, but of thought, analysis and planning. The techniques, ideas, advice and comment with which Mr. Cleveland so clearly and abundantly fills his pages, make this book worth having.

— AIA —

## COMING BOOKS

Among new books of interest to architects are the following soon to be published. They may be ordered in advance and will be delivered upon publication. Add 2½% sales tax to price indicated. Order from

Architects Book and Magazine Service,
P. O. Box 904, Phoenix, phone AL 2-4318.

**At Home with Tomorrow,** by Carl Koch, designer of the Techbuilt House, with Andrew Lewis. June, $6.95.

One of America's top architects, Carl Koch seeks many more comfortable, functional and beautiful houses at lowest cost. Tracing his career and thinking through early developments – the Lustron House, the Acorn, his partially prefabricated Techbuilt House, Conantum Community, steel houses – Mr. Koch leads to his conclusion that the future's best housing will make full use of mass production techniques without sacrificing beauty of design, and will stress the planned community. Photographs and drawings.

**The House of Your Dreams,** by W. A. Kirkpatrick, Professor of Architecture at University of Southern California. April, $4.95.

A book for would-be homeowners, it provides information on specific financial considerations in home buying; what to look for in community services, deeds, title surveying, and mortgages of different kinds; and includes reproductions of legal forms. Discusses space saving, storage, convenience of working areas, orientation of house, insulation, types of heating, air conditioning, sound control.


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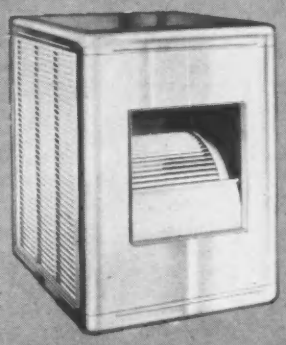

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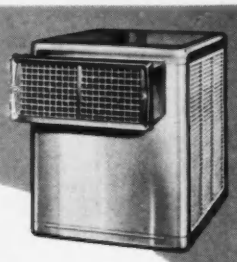

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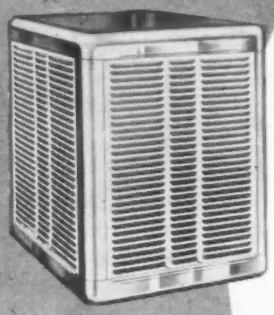

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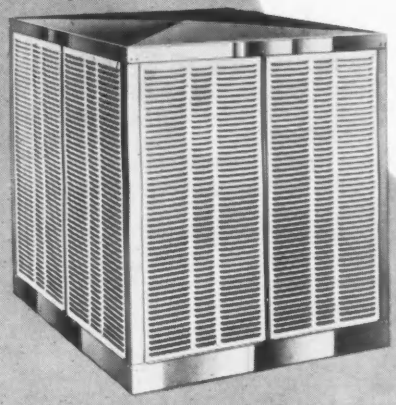

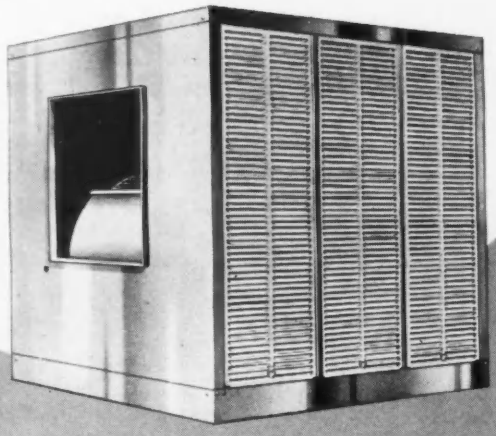

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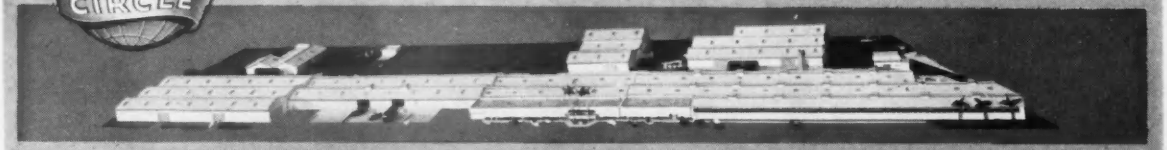

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